C.   Remarks

In response to the Office Action mailed May 4, 2004, the Applicants respectfully request reconsideration of the application in view of the amendments above and the following remarks.

Claims 1-8 and 10 are currently pending.

The Applicants amended claim 1 to specify that the system includes a recording system for recording time of completion information including at least one <u>time of completion value representative of a time of completion from a start time</u>. The time of completion value is recorded when a first communication is received by a trade management processing system. The system further includes a performance processing system that generates a measure of performance with respect to a first participant as a function of the time of completion information. <u>The measure of performance is the time between the completion of steps in the trade management process</u>. The specification provides support for these amendments, among other places, on page 7, between lines 9 and 14, on page 12, between lines 8 and 11, and on page 26, between lines 1 and 7. The Applicants have not added new subject matter.

Rejection of claims 1-10 under 35 USC 103(a)

Claims 1-8 and 10 stand rejected under 35 USC 103(a) as unpatentable over U.S. Patent No. 5,963,914 (hereinafter the '914 patent) issued to Skinner et al. Reconsideration and withdrawal of this obviousness rejection is deemed in order and requested.

The present invention relates to measuring trade management performance. A transaction for the purchase or sale of a security includes at least three steps, the negotiation of the transaction, trade management and the settlement of the transaction. In accordance with the present invention, the trade management process can further be divided into a plurality of steps. These steps include: providing a system for monitoring and/or facilitating each of the trade management process steps; associating a time stamp with the completion of each step in the trade management process; and determining as a function of the time stamps of each of the steps, a measure of the performance of the trade management process.

The measure of performance can be, for example, an average or median time between the completion of any of the steps in the trade management process, a ranking of the participants to the trade management process based upon a time, such as an average or median time between completion of the steps or a measure of the variation or standard deviation of the time between the completion of any of the steps in the trade management process.

The present invention can be incorporated in a system used to facilitate the management of a transaction. That system can be adapted to receive and store trade-related information from

one of the participants to the transaction and forward that trade-related information to the intended recipient or recipients. In accordance with the invention, the system can store that trade-related information in a database along with an indication of the time that the trade-related information was received or the amount of time that has lapsed from a predefined reference time. The system can be adapted to receive and store this trade-related information for a plurality of participants and for a plurality of transactions. The system can further include a reference database that can be used by the participants to store reference information concerning each participant and the system can include this reference information in the information forwarded to the other participants.

As defined by amended claim 1, the invention provides a system providing a measure of performance of participants to a trade management process. The trade management process includes transmitting trade-related information between the participants. The system includes: a trade management processor for receiving a first communication from a first participant to the trade management process; a recording system for recording time of completion information including at least one time of completion value representative of a time of completion from a start time. The time of completion value recorded when the first communication is received by the trade management processor. The system further includes a performance processing system for generating a measure of performance with respect to the first participant as a function of the time of completion information. The measure of performance is the time between the completion of steps in the trade management process.

CLAIM 1 RECITES LIMITATIONS COMPLETELY ABSENT FROM THE '914 PATENT

Contrary to the assertion in the May 4, 2004 Office Action that claim 1 is unpatentable over the '914 patent, amended claim 1 recites elements/limitations completely absent from the '914 patent. The '914 patent does not teach "**recording means for recording** time of completion information including **at least one time of completion value representative of a time of completion from a start time.**" "**[T]he time of completion value recorded when the first communication is received by the trade management processor.**" The '914 patent also does not teach "**performance processing means for generating a measure of performance** with respect to the first participant as a function of the time of completion information." "**[T]he measure of performance is the time between the completion of steps in the trade management process.**"

As an example of a measure of performance of a first participant as a function of the time of completion information, Table A on page 21 of the present application provides an exemplary

Trade Entry Delay Report. The report represents the performance of one or more of the broker/dealers that completed transactions with an Orderer over a predefined period. *The average time reported is the average **amount of time in hours that lapsed between the time the market closed on the trade date to the time the notice of execution issued by the broker/dealer was received by the trade management system** for the transactions processed over a predefined evaluation period.* Table A follows:

TABLE A					
Broker Name	Broker Acronym	Block Level Indicator	Trades Counted	Average time from Execution to Receipt	Detail
Friendly Securities	FSEC	Y	13	0.27	*
Byron Associates	BYATES	Y	44	1.05	*
DWT & Sons	DWTS	Y	80	1.08	*
Porterhouse & Co.	PTHS	Y	393	1.13	*
TTW Corp.	TTW28L	Y	12	1.2	*

In support of the obviousness rejection noted above, page 3 of the May 4, 2004 Office Action merely quotes the recording means and performance processing means recitations and then cites the following sections of the '914 patent: abstract; FIG. 2 and associated text; and col. 3, lines 14-18, 41-56. Each cited section with an associated discussion now follows.

The '914 **abstract** states the following:

> *A **method and system for automatically collecting and for analyzing information about time and work performed on a computer network** which* includes the following elements: a data collector for monitoring certain portions of a user's computer network activity and for logging into a log file those certain portions of a user's computer network activity; *a data analyzer for determining by following **user-defined rules** showing which portions of those certain portions of a user's computer network activity constitutes **continuous** work activities,* and how this work should be categorized by project and task with project; and an external interface for building the rules defining work. *The data collector includes a resident module, such as a TSR (terminate-and-stay-resident) module,* which extends the file system of the computer so that detailed records are kept of file activities. The data collector also routes information about file and keyboard activity, and tabulates and writes such information to a user's disk periodically. [Emphasis added]

Thus, the '914 patent appears to teach a method and system for automatically collecting and for analyzing information about time and work performed on a computer network. The method and system appear to include a data collector for monitoring certain portions of a user's computer network activity and for logging into a log file those certain portions of a user's computer network activity and a data analyzer for determining by following user-defined rules

showing which portions of those certain portions of a user's computer network activity constitutes continuous work activities. As indicated in the '914 patent in col. 2, between lines 36 and 40, Skinner et al. appear to be attempting to satisfy a need "for a technique for selectively and automatically measuring the *actual work done* on various projects on a computer *by an operator such as a telecommuter* [emphasis added]."

The cited **text associated with FIG. 2** is listed between col. 9, line 31 and col. 10, line 5 and states the following:

> *FIG. 2 is a flow chart illustrating initialization of the TSR module 110, where the TSR module 110 performs data collection by logging file activity or by logging keyboard and mouse activity for a computer system.*
>
> Block 202 indicates initialization of a third party product called Coderunner which provides a very compact run-time library for the C programming language. The library sub-routines from the compiler writers for a C program are used to open and close files and to print text on the screen, etc.
>
> Block 204 indicates that parameters are loaded into a file from a parameter file 206. The parameters basically indicate if there are any files or directories that are not to be tracked. For example, a user might not want to keep track of an activity in a temporary directory or every time someone wants to open a font on a Windows directory. To avoid collection of voluminous and meaningless activities,   a   user   can   exclude   such   activities.
>
> Block 208 indicates that the old DOS interrupt vectors are saved. Block 210 indicates that new interrupt vectors are stored in low memory. When a DOS application program wants to invoke a DOS routine, the Intel processor has a software interrupt feature so when the DOS application wants to invoke the DOS routine, DOS loads up some registers and generates an INT 21 command, which goes down to low memory and finds the address where the DOS routine is located and then jumps off to the DOS routine. The contents of that low memory location are saved. Hooking the interrupt means replacing the address of where the function is with the interrupt routine address and then calling the function.
>
> In FIG. 2, the initialization proceeds from top to bottom without stopping and without going to any of the interrupt vectors. When it says store new interrupt vectors, it just means you're storing the addresses of these flow charts discussed in connection with FIGS. 3, 4, and 5, discussed herein below. FIG. 2. only shows initialization   of   the   system.
>
> Block 212 initializes a time-based scheduler routine, which is part of the Coderunner library. The time-based scheduler routine calls however often you want. It is initialized and Block 214 indicates that it is set for a one-second interrupt. [Emphasis added].

Thus, FIG. 2 appears to be a flow chart illustrating initialization of a TSR (terminate-and-stay-resident) module 110, where the TSR module 110 performs data collection by logging file activity or by logging keyboard and mouse activity for a computer system.

The final cited section of the '914 patent, i.e., **col. 3, lines 14-18 and 41-56**, states the following:

> *The time tracking system according to the invention has a data analyzer which provides for the <u>exclusion of time where there is no activity</u> on the computer.* By accurately measuring the time and work on a computer, productivity can be measured and estimates for future projects can be more accurately forecasted with reduced financial risk. The time tracking system according to the invention provides the ability to track only certain user selected files or directories.
>
> In accordance with this and other objects of the invention, *a technique is provided for measuring the amount of work done on a computer*. The invention is a method and system for automatically collecting information about time and work performed on a computer and includes the following elements: data collector means for monitoring certain portions of a user's computer network activity; data collector means for logging into a log file those certain portions of a user's computer network activity; data analyzer means for determining, by means of user-defined rules, which portions of those certain portions of a user's computer network activity constitutes work and how this work should be categorized by project and task with project; and external interface means for building the rules defining work. Work can be organized by customer, department, or any other sets and subsets. [Emphasis added.]

Thus, this cited section appears to assert that the '914 patent teaches a technique for measuring the amount of actual work done on a computer so that one can measure productivity (as opposed total time between two steps in a process). More specifically, the '914 patent appears to teach that the time tracking system has a data analyzer which provides for <u>the exclusion of time where there is no activity on the computer</u>. Indeed, col. 5, lines 54-66 of the '914 patent states:

> A system according to the invention provides information about *continuous activity, as determined by each segment of user activity on a particular project, or task, exceeding an idle time interval. This is in contrast to manual stop/start clock systems which start and stop a clock such that work activity is being registered even if no actual work is being performed. The invention allows a work period to lapse when there is no activity for a time greater than the idle time limit interval.*
>
> Note that in the present invention the idle time interval can be created at the time that a report is prepared. Depending on the type of activity being monitored, the *idle time interval can be set to one minute or to fifteen minutes.* [Emphasis added.]

Thus, the teachings of the '914 patent allow a work period to lapse when there is no activity for a time greater than the idle time limit interval and the idle time interval can be set to one minute or to fifteen minutes. The quoted section of column 5 is consistent with the col. 2, lines 36 to 40, statement in the '914 patent that a need existed for a technique for selectively and automatically measuring the **actual** amount of work done on various projects on a computer by an operator **such as a telecommuter**. In other words, the '914 patent is directed to measuring **actual work done** (as represented by inputs, i.e., keystrokes and mouse inputs) in contrast to measuring **time of completion** between steps in a trade management process.

To reiterate, the '914 patent appears to teach a work monitoring system, noted in the '914 patent as being in contrast to a stop/start clock system, which starts and stops a clock such that work activity is being registered even if no actual work is being performed. In other words, the '914 patent does not teach a performance processor that registers time between the completion of steps in the trade management process even if at times no actual work is being performed by the parties involved, e.g., broker and/or investor/orderer. Furthermore, as acknowledged on page 3 of the May 4, 2004 Office Action, "Skinner et al. did not specifically indicate the system is only applicable in a particular industry." In other words, the '914 patent does not discuss a trade management process at all. Indeed, the term trade is not found anywhere in the '914 patent and the '914 patent does not teach generating a measure of performance, the measure of performance being the time between the completion of steps in a trade management process.

Thus, the '914 patent plainly does not teach "**recording means for recording** time of completion information including **at least one time of completion value representative of a time of completion from a start time, the time of completion value recorded when the first communication is received by the trade management processor**" because the '914 patent teaches that the system stops recording time when the system is idle for more that a specified time, e.g., one or fifteen minutes. Similarly, the '914 patent does not teach "**performance processing means for generating a measure of performance** with respect to the first participant as a function of the time of completion information." "**[T]he measure of performance is the time between the completion of steps in the trade management process**" for the same reason. The recording means and performance processor recitations are claimed in amended claim 1.

The Office Action does not and cannot point to a teaching in the '914 patent of the above-referenced elements/limitations. If the Examiner repeats this rejection, the Applicants respectfully request that the Examiner specify where in the '914 patent such a recording means and such a performance processing means are taught.

THERE IS NO SUGGESTION IN THE CITED DOCUMENTS TO MAKE THE MODIFICATION INDICATED IN THE MAY 4, 2004 OFFICE ACTION

Moreover, there is no motivation or suggestion in the cited documents to make the modification to the '914 patent indicated on page 3 of the May 4, 2004 Office Action. Obviousness cannot be established by combining the teachings of the cited documents to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination. See In re Geiger, 815 F.2d 686, 2 USPQ 2d 1276, 1278 (Fed. Cir. 1987).

In other words, it is impermissible for an Examiner to use the claimed invention as a "template" to piece together the teachings of the prior art references so as to render the claimed invention obvious. In re Gorman, 933 F.2d 982, 987 (Fed. Cir. 1991). Under no condition can the Examiner combine the teachings of references, unless those references include some teaching or suggestion supporting the combination. In re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (quoting ACS Hosp. Systems, Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577 (Fed. Cir. 1984)).

The Examiner is not allowed to use hindsight to pick and choose among pieces of prior art references so as to reconstruct the claimed invention. In re Fritch, 972 F.2d at 1266. As the Federal Circuit has observed on more than one occasion, "[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (quoting W.L. Gore & Assoc. v. Garlock. Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983)). See also Pentec, Inc. v. Graphic Controls Corp., 776 F.2d 309, 313, 227 USPQ 2d. 1923, (Fed. Cir. 1985). Additionally, it is improper to focus on obviousness of substitutions, instead of on invention as a whole. Gillette Co. v. S.C. Johnson & Son, Inc. 16 USPQ 2d. 1923 (Fed. Cir. 1990)

It is the invention as a whole which must be evaluated. "...the changes must be evaluated in terms of the whole invention, including whether the prior art provides any teaching or suggestion to one of ordinary skill in the art to make the changes that would produce the patentee's method and device." Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 15 USPQ 2d. 1321 (Fed. Cir. 1990)

The May 4 2004 Office Action does not point to any teaching in the cited document as providing a motivation or suggestion for making a modification to the '914 patent as suggested in the office action to achieve the claimed invention. Rather page 3 of the May 4, 2004 Office Action merely states the following:

> Skinner et al. [the '914 patent] did not specifically indicate the system is only applicable in a particular industry. The Examiner takes Official Notice that tracking time in connection with the work performed is old and well known in the art. It would have been obvious to one of ordinary skill in the art to modify Skinner's teaching to be used in the trade industry.

As noted above, the '914 patent does not teach the recording means and the performance processor means recitations. Indeed, rather than suggest modification of a system for monitoring actual work done to include the missing recitations, the '914 patent specifically contrasts it's subject matter with a stop/start clock system that starts and stops a clock such that work activity is registered even if no actual work is performed. Thus, the '914 patent does not suggest modifying the subject matter of the '914 patent to include, for example, a performance processing system that registers the time between the completion of steps in a trade management process even if at certain times between the steps no actual work is being performed by the parties involved, e.g., broker and/or investor.

In other words, the '914 patent teaches away from modifying its subject matter to achieve the claimed invention because it teaches that one should measure actual work not time of completion including time during which no work is performed. As noted on page 7, between lines 1 and 14, the invention of claim 1 is concerned with time of completion between steps in a trade management process regardless of whether work is always being performed because a primary goal in trade management performance is simply to achieve timely settlement. The ability to achieve timely settlement can be affected by factors other than the actual work performed by a party involved, e.g., a broker.

Furthermore, as acknowledged on page 3 of the May 4, 2004 Office Action, "Skinner et al. did not specifically indicate the system is only applicable in a particular industry." In other words, the '914 patent does not discuss a trade management process at all. Indeed, the term trade is not found anywhere in the '914 patent and, as noted above, the '914 patent does not teach generating a measure of performance, the measure of performance being the time between the completion of steps in a trade management process.

Page 3 of the May 4, 2004 Office Action states that the Examiner takes Official Notice that tracking time in connection with the work performed is old and well known in the art and that it would have been obvious to one of ordinary skill in the art to modify Skinner's teaching to

be used in the trade industry. This motivation appears to be derived from the Examiner's personal knowledge. Furthermore, stating that "tracking time in connection with the work performed is old" does not motivate one to modify the subject matter of the '914 patent to "be used in the trade industry" because, among other reasons, tracking time in connection with work performed has no specific connection with trade management. Indeed, as noted above, the '914 patent teaches away from tracking all time associated with steps in a process such as a trade management process. If the Examiner repeats the present rejection, per 37 CFR 1.104(d)(2) and MPEP 2144.03-.04, the Applicants respectfully request that the Examiner provide an affidavit stating the motivation to modify the '914 patent to achieve the claimed invention. 37 CFR. 1.104(d)(2) states the following:

> When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

The Office Action does not and cannot point to a suggestion or motivation in the '914 patent for modifying the subject matter of the '914 patent to achieve the invention claimed in amended claim 1. If the Examiner repeats this rejection, the Applicants respectfully request that the Examiner specify where in the '914 patent such a suggestion exists.

In sum, the cited patent does not teach or suggest the invention of amended claim 1 and therefore amended claim 1 is patentably distinct over the '914 patent.

Independent claim 5 includes recitations similar to the recording means and performance processing means recitations of claim 1 and independent claim 10 is a method claim that is similar to claim 1. Therefore, claims 5 and 10 are patentably distinct over the cited patents for the reasons cited above.
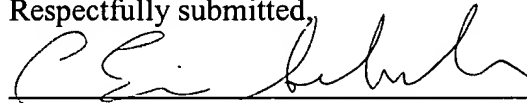
Claims 2-4 depend from claim 1 and claims 6-8 depend from claim 5. As a consequence claims 2-4 and 6-8 are patentably distinct over the cited patents at least for the reasons cited above.

The Applicants believe that this application is in condition for allowance and respectfully request entry of this amendment and allowance of the application. This amendment does not introduce new matter.

If there are any questions regarding this amendment and/or these remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

The Commissioner is hereby authorized to charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 20558-011.

Respectfully submitted,

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